

## R, 3d SERIES

legations were without merit when it ed Rockwell to indemnify its di-  
s." Appellant's Brief at 26. In fact,  
lering indemnification to the "fullest  
t permitted by the laws of the State  
laware" there was no determination  
a California court as to the allowabili-  
fees under Delaware law. The perti-  
Delaware law gives corporations the  
r to indemnify" a director-defendant  
director acted in good faith, 8 Del. C.  
(b) (emphasis added), and Rockwells  
vs required that Rockwell exercise  
ower. But there has been no judicial  
mination of good faith here, and  
vells determination of good faith and  
quent indemnification is irrelevant.  
we cannot agree that the district  
s approval of the settlement terms  
te that the *Citron* plaintiffs would  
ad very little likelihood of success on  
erits because the defendants acted in  
faith.<sup>17</sup>

## CONCLUSION

Board committed legal error in de-  
ning the allowability of Rockwell's le-  
fense costs based on whether the  
conferred a "benefit [on] the Govern-  
and based on a "but for" standard  
oked solely to the fact that admitted  
duct by Rockwell formed the basis  
e complaint. We vacate the Board's  
on and remand to the Board for fur-  
roceedings consistent with this opin-  
On remand, the Board may allow the  
only if it determines that the plain-  
the *Citron* lawsuit had "very little  
ood of success on the merits" of pre-

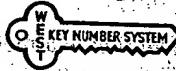
## VACATED AND REMANDED.

er of collateral estoppel, it would be  
ng against the government.

IN RE GLAUG  
Cite as 283 F.3d 1335 (Fed. Cir. 2002)

## COSTS

No costs.



In re Frank S. GLAUG, and  
Margaret A. Kato.

Nos. 00-1571, 08/455,374.

United States Court of Appeals,  
Federal Circuit.

DECIDED: March 15, 2002.

Patent applicant appealed decision of  
Patent and Trademark Office (PTO) Board  
of Patent Appeals and Interferences re-  
jecting all claims for process for making  
training pants with unitary waist elastic  
system. The Court of Appeals, Pauline  
Newman, Circuit Judge, held that place-  
ment of adhesive in spaced apart zones, in  
patent applicant's process to manufacture  
long lasting disposable training pants, was  
not obvious.

Reversed.

1. Patents  $\Rightarrow$  32

During patent examination the Patent  
and Trademark Office (PTO) bears the  
initial burden of presenting a prima facie  
case of unpatentability.

2. Patents  $\Rightarrow$  32

If during patent examination the Pat-  
ent and Trademark Office (PTO) fails to  
meet burden of presenting a prima facie  
case of unpatentability, then the applicant  
is entitled to the patent.

3. Patents  $\Rightarrow$  32

When a prima facie case of unpatenta-  
bility is made by the Patent and Trade-  
mark Office (PTO), the burden shifts to  
the patent applicant to come forward with  
evidence or argument supporting patenta-  
bility.

4. Patents  $\Rightarrow$  36(2)

Once Patent and Trademark Office  
(PTO) makes prima facie case of unpatent-  
ability, patentability vel non is determined  
on the entirety of the record, by a prepon-  
derance of evidence and weight of argu-  
ment.

5. Patents  $\Rightarrow$  16.26

Placement of adhesive in spaced apart  
zones, in patent applicant's process to  
manufacture long lasting disposable train-  
ing pants, was not obvious in view of prior  
art reference to training pants; in prior  
art, pants were formed by spreading adhe-  
sive upon a continuous web of fabric, while  
in applicant's process, adhesive was placed  
in zones that were separated by adhesive-  
free zones, so as to reduce area of attach-  
ment between elastic and fabric, and spac-  
ing of adhesive permitted fabric to bunch  
and stretch, thereby reducing rate of elas-  
tic decay compared with other training  
pants.

6. Patents  $\Rightarrow$  165(3)

When a general term is used in patent  
application to introduce a concept that is  
further defined more narrowly, the general

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term must be understood in the context in which the inventor presents it.

#### 7. Patents — 16.18

While the measurement of a physical property may not of itself impart patentability to otherwise unpatentable claims, when the measured property serves to point up the distinction from the prior art or advantages over the prior art, that property is relevant to patentability, and its numerical parameters can not only add precision to the claims but also may be considered, along with all of the evidence, in determination of patentability.

#### 8. Patents — 35

An inventor's explanation of how the invention works does not render obvious that which is otherwise unobvious, for purposes of patentability.

Meredith Martin Addy, Brinks, Hofer Gilson & Lione, of Chicago, IL, argued for appellants. With her on the brief were Robert N. Carpenter and Henry L. Brinks.

Linda Moncys Isacson, Associate Solicitor, Office of the Solicitor, Patent and Trademark Office, of Arlington, VA, argued for appellee. With her on the brief was John M. Whealan, Solicitor, and Mary Critharis, Associate Solicitor.

Before MAYER, Chief Judge,  
NEWMAN and MICHEL, Circuit Judges.

PAULINE NEWMAN, Circuit Judge.

Frank S. Glaug and Margaret A. Kato (herein "Glaug") appeal the decision of the Board of Patent Appeals and Interferences

of the United States Patent and Trademark Office, rejecting all of the claims patent application Serial No. 08/455,3 entitled "Process for Making a Training Pant Having a Unitary Waist Elastic System." The Board's decision is reversed.

The Glaug invention is a method of making disposable training pants. The pants are described as providing a more comfortable fit over a wider weight and size range as well as a longer useful life, as compared with known training pants, because the elasticity at the waist is preserved over a longer period of repeated cycles of elastic extension and contraction, such as when the child lowers and raises the pants. These benefits result from the manner in which the elastic is adhered at the waist, achieved by placing the adhesive that holds the elastic in spaced zones so that there are zones wherein the fabric is not adhered between the adhesive zones, and folding the edge of the fabric over the elastic. Claim 1, the broadest claim, is representative. Emphases have been added to the features asserted by Glaug to provide distinction from prior art processes:

1. A process having a machine direction and a cross direction for making disposable absorbent articles, comprising the steps of:

[a] continuously moving a base layer generally in a machine direction, the base layer comprising opposite portions generally extending in the machine direction,

[b] providing a plurality of absorbent structures having respective length dimensions greater than respective width dimensions,

[c] positioning the absorbent structures at spaced apart locations between

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Patent and Trade-  
all of the claims of  
ial No. 08/455,374  
making a Training  
Waist Elastic Sys-  
cision is reversed.

s a method of mak-  
pants. The pants  
ing a more comfort-  
ight and size range  
ul life, as compared  
pants, because the  
is preserved over a  
ed cycles of elastic  
tion, such as when  
raises the pants.  
from the manner in  
hered at the waist,  
the adhesive that  
aced zones so that  
in the fabric is una-  
hesive zones, and  
he fabric over the  
broadest claim, is  
ases have been add-  
serted by Glaug to  
m prior art process-

ing a machine di-  
direction for making  
it articles, compris-

oving a base layer  
chine direction, the  
sing opposite edge  
extending in the ma-

urality of absorbent  
respective length di-  
han respective width

: absorbent structure  
ications between the

[c] opposite edge portions of the base layer,  
such that the length dimensions of the  
absorbent structure are generally trans-  
verse to the machine direction,

[d] applying an adhesive, generally in  
the machine direction, at selected  
spaced apart zones of each edge por-  
tion, the zones of each edge portion  
being spaced apart in the machine di-  
rection,

[e] continuously delivering an elastic  
member generally in the machine di-  
rection onto each edge portion,

[f] folding each edge portion, gener-  
ally in a cross direction, over the re-  
spective elastic member,

[g] joining together each folded edge  
portion and the elastic member,

[h] folding the continuously moving  
base layer along a fold line generally  
parallel to the machine direction, and

[i] forming a plurality of disposable ab-  
sorbent articles having a respective plu-  
rality of closed-loop waist-elastic sys-  
tems in which each waist elastic system  
has an average maximum magnitude  
of decay less than about 66.67 grams  
in an extension range of about 175  
millimeters to about 300 millimeters  
over the first three cycles.

The placement of the adhesive is illustrat-  
ed in the following diagram of the con-  
struction process:

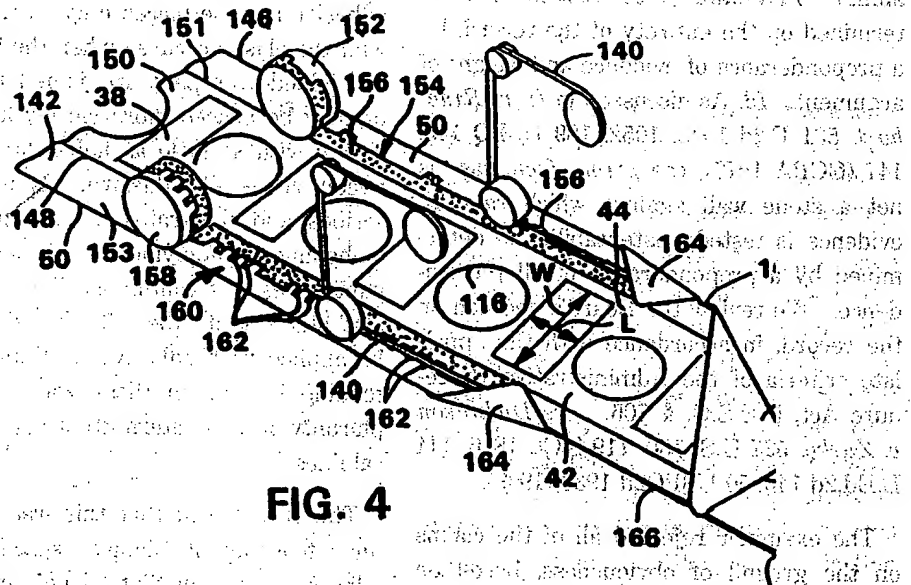


FIG. 4

Figure 4 shows a process for making one  
embodiment of the pant. As base layer  
142 is continuously moved through the ma-  
chine, absorbent structures 38 are at-  
tached and leg openings 116 are cut. To  
form the waist elastic system, adhesive is  
applied by means of patterned adhesive  
rolls 152 and 158. Glaug explains that  
different adhesive patterns are shown on  
rolls 152 and 158 to illustrate different  
possible patterns, but that generally the

patterns are the same on both sides of the  
base layer. The adhesive 154 is thus ap-  
plied in a pattern, which includes a pluri-  
ty of distinct adhesive zones 156 and 162  
which are spaced apart from one another.  
An elongate elastic member 140 is joined  
to the adhesive zones 156 and 162. The  
remaining adhesive, as at 154, serves to  
join the folded-over edge of the base layer  
142 after it passes folding boards 164.  
The structure is then folded down its cen-

ter, cut at the leg openings, and sealed to form pants.

### *The PTO Proceedings*

[1-4] During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed.Cir.1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed.Cir.1984). If the PTO fails to meet this burden, then the applicant is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability. Patentability *vel non* is then determined on the entirety of the record, by a preponderance of evidence and weight of argument. *Id.* As discussed in *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976), the *prima facie* case is not a stone wall against which rebuttal evidence is tested; patentability is determined by a preponderance of all the evidence. We review the Board's decision on the record, in accordance with the appellate criteria of the Administrative Procedure Act, 5 U.S.C. § 706. *See Dickinson v. Zurko*, 527 U.S. 150, 119 S.Ct. 1816, 144 L.Ed.2d 143, 50 USPQ2d 1930 (1999).

The examiner rejected all of the claims on the ground of obviousness, based on United States Patent No. 5,147,487 (Nomura) in view of United States Patent No. 3,225,765 (Magid). Both references relate to disposable baby pants. The Nomura reference shows a method having the steps of Glaug's claim 1 except for those shown *supra* in bold face. Magid shows a fold or hem of fabric over the elastic at the waist and legs of baby pants. The Board found that Nomura suggested "intermittent" spacing of the adhesive for the elastic

waist, that the numerical magnitude of elastic decay as stated in claim 1 is inherent in the Glaug structure and thus not of patentable significance, and that it would have been obvious to place the Magid hem over the Nomura elastic. The Board held that a *prima facie* case of obviousness was made, and that Glaug's evidence of superior results was inadequate to rebut that conclusion.

### *Claim Clause [d]—The Spaced Apart Adhesive Zones*

[5] Claim clause [d] states that the adhesive is applied "generally in the machine direction" in "zones" that are "spaced apart." The specification explains that the adhesive may be placed only on the seams with the elastic secured when the halves of the folded-over pant are joined together, or may be spaced more closely along the elastic with as little as half-inch gaps between zones of adhesive. Nomura describes and illustrates, in the preferred embodiments, applying the adhesive to the pant edges in a continuous film. Nomura also states that "the adhesive zones may be applied with adhesive continuously extending overall on these zones, or in a plurality of dots, intermittent lines, or helical lines."

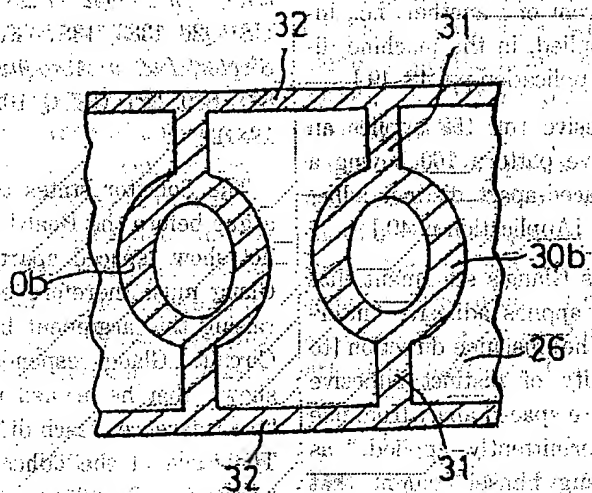
The Board held that this was a *prima facie* teaching of Glaug's "spaced apart" adhesive zones, in that Glaug's placement of adhesive in zones is taught by or would have been obvious from the Nomura reference. The Board pointed out that both Nomura and Glaug use the word "intermittent" in describing the adhesive.

Glaug argues that Nomura's illustrations do not show intermittent zones of adhesive, and that the only usage of "intermittent" by Nomura is in one broad catch-all sentence at the end of the description:

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Glaug argues that Nomura clearly did not contemplate spaced zone-type gaps in the adhesive placement in the machine direction. Glaug points to the following il-

lustration from Nomura, and argues that Nomura does not show adhesive placed in zones that are separated by adhesive-free zones:



In Nomura, the pants are formed by spreading adhesive upon a continuous web 26, formed of fibrous non-woven fabric, introducing elastic members (not shown) and bonding the arrangement to another continuous web, sandwiching absorbent material within. The diagram reproduced shows the placement of adhesive at 30b around the leg openings, at 32 along the waist, and at 31 extending from opposite sides of adhesive 30b to the adjacent lateral edges of the web 26.

Glaug also points out that Nomura adheres the elastic in an entirely different way from the Glaug process. Nomura stretches the elastic, and applies the adhesive to the fabric in a broad band in order to hold the elastic in the stretched position during the manufacturing process. Glaug points out that the Nomura adhesive must be placed so that it provides a large surface area and continuous attachment between the elastic and the fabric. In contrast, the Glaug specification is explicit that the adhesive is applied so as to reduce

the area of attachment between the elastic and the fabric, so that zones of fabric are not adhered to the elastic and can bunch or stretch between the points of adhesion.

Glaug is correct that the Nomura usage of "intermittent" does not suggest the presence of zones entirely free of adhesive and disposed generally in the machine direction. Nomura's specification makes clear that his process requires broad contact between the elastic and the adhesive, with illustrations of continuous zones of adhesive that fix the fabric to the stretch elastic. In contrast, Glaug's specification uses "intermittent" to designate only distinct zones of adhesive spaced apart by zones free of adhesive. Typical descriptions from Glaug's specification are:

The intermittent pattern of joining is a pattern of 1.27 centimeter (0.5 inch) wide adhesive zones separated by 1.27 centimeter wide zones with no adhesive. [Application p. 31.]

[P]ulsed adhesive system 90 can apply an adhesive pattern such as an adhesive

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zone 92 (Fig. 5) having a window 93 that is void of adhesive. [Application p. 42.]

Adhesive pattern 154 includes a plurality of distinct adhesive zones 156 which are spaced apart from one another, i.e., intermittently applied, in the machine direction 144. [Application pp. 48-49.]

Patterned adhesive roll 158 applies an optional adhesive pattern 160 having a plurality of spaced-apart distinct adhesive zones 162. [Application p. 49.]

The Solicitor cites Glaug's statement that the adhesive roll applies adhesive "intermittently . . . in [the] machine direction [to include] a plurality of distinct adhesive zones 156 which are spaced apart from one another, i.e., intermittently applied," as showing that Glaug himself taught that "spaced apart" and "intermittent" have the same meaning. Glaug responds that his meaning of "intermittent" is as described in the specification, which defines what Glaug meant. Glaug states that "intermittent," in his method, means that the adhesive zones are separated by zones of no adhesive, and thus is distinguished from overlapping strips of adhesive as found in Nomura. Although the Solicitor states that "Nomura expressly teaches 'applying an adhesive' in 'spaced apart zones,'" PTO brief at 14, these words are quoted from Glaug, not Nomura.

[6] It is well established that when a general term is used to introduce a concept that is further defined more narrowly, the general term must be understood in the context in which the inventor presents it. *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed.Cir.1998) ("This rule of construction recognizes that the inventor may have imparted a special meaning to a term in order to convey a character or property or nuance relevant

to the particular invention.") The word "intermittent" is susceptible of various meanings, and the inventor's lexicography must prevail, *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388, 21 USPQ2d 1383, 1387 (Fed.Cir.1992); *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889, 221 USPQ 1025, 1031 (Fed.Cir. 1984).

The Solicitor states that Glaug did not argue before the Board that Nomura does not show "spaced apart zones," and that Glaug must therefore be prohibited from raising this argument before the Federal Circuit. Glaug responds, and the record shows, that he argued to the Board that "the references teach different structures." The issue of the adhesive structure was before the Board, whose familiarity with the content of the application and the references on which it relies may be assumed by the patent applicant, and need not be repeated as if on appeal to a non-technical court. An applicant's arguments to the PTO examiner and Board are not normally presented in the identical phrases and elaborative lengths that are usually needed in an appeal to the court. It is apparent that the different structures of Glaug's invention and those of the Nomura reference were at issue and were argued before the Board. We thus agree with Glaug that the Nomura reference does not present a *prima facie* case of obviousness of the placement of the adhesive in Glaug's process.

#### **Claim Clause [i]—The Decay Parameters**

Glaug tabulated, in his specification, comparative data of elastic decay using his system of adhesive zones, as compared with seven commercial brands of training pants. These data showed that the elastic in the pants made by his process exhibited

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less than half the decay in elasticity, compared with the best of seven commercial brands of training pants. The Board rejected this evidence because Glaug did not describe how the elastic waist was constructed in these prior art pants. The Solicitor argues that these comparative data are not of sufficient quality to overcome the *prima facie* case of obviousness made by the prior art. On its face, Glaug's data show improvement over these commercial products. These data, included in the specification, are not offered as rebuttal evidence, but as illustrative of an advantageous property of Glaug's training pant as measured by the rate of elastic decay.

Nomura does not suggest that elastic decay would be reduced by spaced placement of the adhesive to provide adhesive-free zones. Thus, Glaug argues, the claim limitation "in which each waist elastic system has an average maximum magnitude of decay less than about 66.67 grams in an extension range of about 175 millimeters to about 300 millimeters over the first three cycles" is neither taught nor suggested by Nomura.

[7] The Board held that the numerical measure of elastic decay in the Glaug claims is simply inherent in any improvement achieved by Glaug through the placement of his adhesive, and does not impart patentability to the claims. While the measurement of a physical property may not of itself impart patentability to otherwise unpatentable claims, when the measured property serves to point up the distinction from the prior art, or advantages over the prior art, that property is relevant to patentability, and its numerical parameters can not only add precision to the claims but also may be considered, along with all of the evidence, in determi-

nation of patentability. See *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1216, 36 USPQ2d 1225, 1228 (Fed. Cir. 1995) (affirming the district court's definition of "skinless" as a performance characteristic in accordance with the measurements of bubble point, flow time, and KL curve); *In re Soni*, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995) ("One way for a patent applicant to rebut a *prima facie* case of obviousness is to make a showing of 'unexpected results,' i.e., to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected.")

#### The Technical Explanation

Glaug explained in the specification that his use of spaced adhesive zones "reduc[es] the surface area of joinder between the elastic member and the layer of material [with] a resultant reduction in the elastic member's loss of elasticity." [Application, p. 9]. The Board stated, and the Solicitor argues, that Glaug's technical explanation of how his invention works establishes that any "intermittently spaced" adhesive would inherently achieve the benefits of the invention. The Board held that this renders the claims obvious because "according to appellants' above-quoted disclosure, this reduction in the surface area of joinder would inherently cause a reduction in the loss of elasticity (decay) of the Nomura elastic members." Bd. op. at 5. Glaug complains that the Board used Glaug's own explanation of his invention against him, instead of citing evidence from the prior art.

[8] An inventor's explanation of how the invention works does not render obvious that which is otherwise unobvious.

Since the prior art does not show the spaced zones of adhesive that are provided by Glaug, his teaching that the spacing permits the fabric to bunch and stretch is not evidence of obviousness. If anything, this teaching supports the unobviousness of Glaug's discovery that spacing the adhesive reduces elastic decay so that the magnitude of decay is as stated in claim clause [i].

### Conclusion

The material facts are generally undisputed. On the entirety of the record we conclude, as a matter of law, that the placement of the adhesive in spaced apart zones generally in the machine direction would not have been obvious in view of Nomura. See *Graham v. John Deere*, 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545, 148 USPQ 459, 467 (1966) (obviousness is a question of law based on underlying facts).

### Claim Clause [f]—The Folded Edge Over the Elastic

The Magid reference describes a tubular edging of fabric on baby pants to reduce skin irritation. The Board found that this constitutes a folded "hem" which would obviously increase the strength of the edge, and ruled that it would for this reason have been obvious to fold the edge over the elastic of the Glaug training pant.

Glaug states that increased strength of a hem is irrelevant to his process, and points out that Magid does not relate to the adhesive placement. In view of our conclusion that Glaug's adhesive placement establishes patentability of claim 1, we need not consider the effect of the Magid reference.

1. Glaug does not appeal the rejection of claims 12 to 25 for obviousness-type double

The decision of the Board is reversed.<sup>1</sup>

**REVERSED.**



**THE MEAD CORPORATION,**  
Plaintiff-Appellant,

v.

**UNITED STATES, Defendant-Appellee.**

No. 98-1569.

United States Court of Appeals,  
Federal Circuit.

March 8, 2002.

After remand of tariff classification case, 533 U.S. 218, 121 S.Ct. 2164, 150 L.Ed.2d 292, The Court of Appeals, Rader, Circuit Judge, held that imported day planners could not be classified as bound diaries under subheading 4820.10.20 of Harmonized Tariff Schedules of the United States (HTSUS) but were properly classifiable under the "other" provision of subheading 4820.10.40.

Reversed.

### 1. Customs Duties — 85(3)

Court of Appeals reviews the Court of International Trade's grant of summary

patenting. That rejection is not affected by our decision.